

Amendments to the Drawings:

Please cancel the drawings from the application.

REMARKS

The Office Action reflects careful consideration of the application by the Examiner, and same is appreciated. The Office Action will be responded to by reference to the numbered items starting in the detailed action on page 2 of the Office Action. It is believed it is late for Applicant to respond to the points raised in 2a) and 2b), so nothing seems to be capable of being done at this point other than to try to do better in the future.

As to items 2c) and 2d), replacement amendments are made hereinabove.

In item 3, beginning at the bottom of page 4 of the Office Action, the Examiner said that applicant was at one point saying that the addition of a flame retardant is necessary, and at other times not. To accommodate the Examiner's concerns, the application is being conformed to indicate that flame retardant is added to the bath. In this regard, amendments to the specification that made it appear that the FR additive was optional have been reversed. Also, claim 42, the independent claim of the application, has been amended to replace the element of a fluorochemical with the element of a flame retardant. This should overcome a number of the concerns raised in the Office Action. In particular, the rejections of the claims under 35 USC § 112, first paragraph of item 4 of the Office Action appear to have been made moot, as has the new matter rejection of item 5.

As to item 6 of the Office Action, counsel assumes that the Examiner is not familiar with the terms "warp yarn" and "fill yarn," and also that the abbreviation of 'osy' is new to the Examiner.

Warp yarns and fill yarns are the yarns that are found in woven fabrics. The warp yarns are those that extend lengthwise of the woven fabric. The fill yarn is the crosswise yarn that is

inserted between the separated warp yarns during weaving. Fill yarns are also sometimes referred to as filling or weft yarn. The use of Applicant's nomenclature is widespread in the textile industry, as exemplified by U.S. Patent 6,020,275 to Stevenson, et al., copy enclosed. The Examiner can review the abstract, or more, of that patent to see that it uses of the same terminology used by Applicant. Thus, further definition of warp yarn and fill yarn is not deemed to be required to address those of ordinary skill in the art.

The abbreviation "osy" stands for "ounces per square yard," and is also a widely used abbreviation in the textile industry. As an example, Applicant encloses copies of two pages of search results from the U.S. Patent and Trademark Office database showing that the "osy" acronym is used in 721 patents together with the word "fabric" or "textile". Again, further elaboration to those of ordinary skill in the art is not needed.

If the Examiner has particular needs for further clarification that Applicant has not addressed, she is encouraged to telephone the undersigned and explain what further she thinks is needed to clarify the terminology.

Item 8 of the Office Action is addressed in the amendment to claim 42.

In item 9, the Examiner rejected several claims as not meeting the written description requirement, for several reasons. In item 9a), the Examiner says that the addition of AVORA FR(Kosa) polyester being inherently flame retardant is new matter. Applicant simply has no understanding of how the Examiner could reach that conclusion. The Examiner is referred to page 2, lines 9-19 of Applicant's original specification explaining exactly what AVORA FR(Kosa) polyester is. If the Examiner has some other concern in mind, she is encouraged to telephone the undersigned, so that the situation can be clarified.

Claims 41 and 42 were cited in item 9b) as claiming new matter relating to “polyester incorporating organic phosphorous compounds.” In this regard, the Examiner is referred to the enclosed page from the www.avora.com website describing “how it works.” That page points out that during the manufacture of the AVORA FR fiber, “a proprietary organic phosphorus compound is incorporated into the polyester polymer.” This merely provides information exemplifying what is already inherent in referring to AVORA FR fibers, as would be known to those of ordinary skill in the art. Inherent information is not new matter.

In item 9c), the Examiner says that it is new matter to refer to Zonyl® 7040 as a water based dispersion of fluorinated acrylic copolymer. This information was added in response to Examiner’s prior concern that items were referred to solely by trademark, and it appeared that the Examiner wanted a more technical definition of the compound in question. So, Applicant provided it by the amendment -- that does not add new matter, it merely explains what is already inherent in referring to Zonyl® 7040. MPEP § 608.01(v) Those of ordinary skill in the art were well aware of this from the disclosure of U.S. Patent 6,228,477 to Klare, et al. The Examiner is particularly referred to column 9, lines 59-65 of Klare, et al., which points out that Zonyl® is a family of acrylic-based polymers with fluorocarbon side chains and Zonyl® 7040 is an aqueous dispersion. Thus, Applicant’s amendment merely restates what was already known to those of ordinary skill in the art. This comment also addresses the Examiner’s item 9d).

In item 10 of the Office Action, the Examiner asks for removal of the AVORA polyester explanation and the Zonyl® 7040 explanation. This is not being done in view of the fact that information supplied is not new matter and was already known to those of ordinary skill in art, as set forth above.

Item 12a) of the Office Action rejects claim 42 and dependents thereon as not requiring flame retardant. This has been addressed hereinabove by amendment to claim 42. Similarly, item 12b) has been addressed by deleting the requirement for a fluorochemical.

As to item 13, Applicant is herewith cancelling the drawings.

In items 17, 18, 23, 24, and 25 the Examiner rejects the claims as being anticipated by or obvious from the disclosures of JP 07-157977 or EP 503114. It is believed that the amendment to claim 42 to recite the addition of flame retardant as part of the composition with which the fabric is saturated overcomes these rejections. Neither the Japanese nor the European reference includes a FR agent as a finishing agent, so the claims patentably distinguish over the references.

For the Examiner's additional understanding, Applicant encloses an English translation of the specification of EP 503114. This translation was prepared by an employee of an affiliate of the Assignee of this application.

Again, if the Examiner has any remaining concerns, she is encouraged to telephone the undersigned for expeditious handling.

Respectfully submitted,



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CERTIFICATE OF MAILING

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PRODUCTS

AVORA® FR VERSUS OTHER PRODUCTS

ADVANTAGES VERSUS COTTON

IN USE PERFORMANCE

HOW IT WORKS

FLAME TEST VIDEO

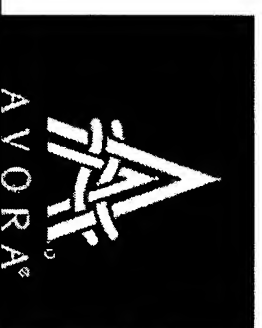
CARE INSTRUCTIONS

PREPARATION, DYEING & FINISHING

FR STANDARDS WORLDWIDE

HOW IT WORKS - During manufacture of the fiber, a proprietary organic phosphorus compound is incorporated into the polyester polymer. The result is Avora® FR with a lower melting point than regular polyester. This makes it difficult for combustion to take place as the fiber melts and shrinks away from flames. The phosphorus component prevents melting drips from occurring and prevents further burning by self extinguishing.

Combustion gases from Avora®FR fabrics are similar to regular polyester and are composed primarily of carbon monoxide (CO), carbon dioxide (CO₂) and water vapor, as well as small quantities of organic compounds which contain primarily aldehyde and keto groups. Gases such as hydrochloric acid (HCl), dioxins, hydrogen cyanide (HCN), nitrous oxides (NO) or sulfur dioxide (SO₂) are not present. The Avora FR polymer contains no brominated compounds.



FR

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